



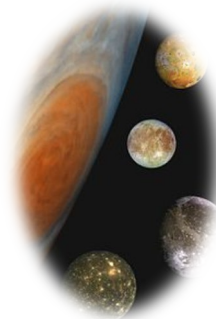
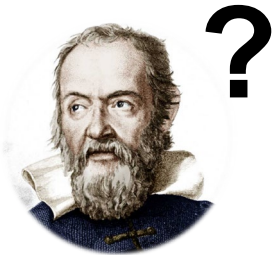
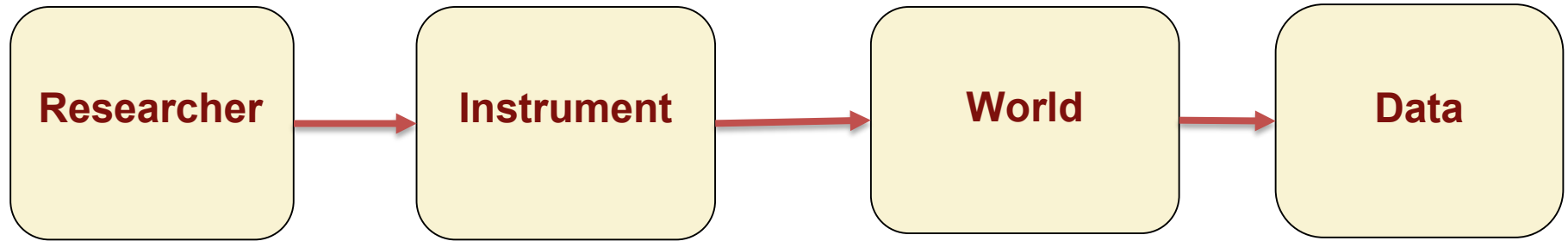
BEST PRACTICES IN DESIGNING AND CONDUCTING QUALITY RESEARCH SERIES

Sponsored by IU Center for Survey Research and
Social Science Research Commons

February 27, 2020

Developing and testing quality data collection instruments

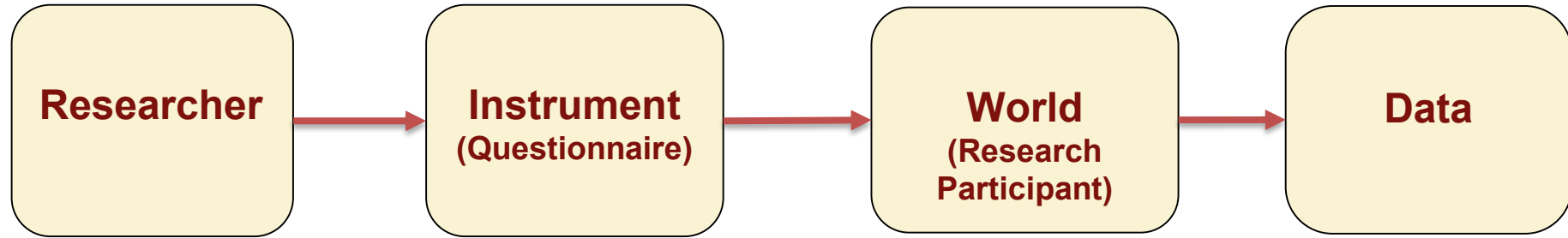
The logic of data collection:



A page from Galileo's Sidereus Nuncius, showing a table of star positions and magnitudes. The table has columns for 'Pos.' (Position), 'Dist.' (Distance), 'Magn.' (Magnitude), and 'Warr.' (Warrant). The stars are listed in rows, with their positions given in right ascension and declination.

Pos.	Dist.	Magn.	Warr.
11	17	•••••	•
12	18	•••••	•
13	19	•••••	•
14	20	•••••	•
15	21	•••••	•
16	22	•••••	•
17	23	•••••	•
18	24	•••••	•
19	25	•••••	•
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79	85	•••••	•
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82	88	•••••	•
83	89	•••••	•
84	90	•••••	•
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86	92	•••••	•
87	93	•••••	•
88	94	•••••	•
89	95	•••••	•
90	96	•••••	•
91	97	•••••	•
92	98	•••••	•
93	99	•••••	•
94	100	•••••	•

The rather less simple reality: short lists of things that can impact data quality



- Researcher biases
- Presentation or perception of the researcher and/or study sponsor



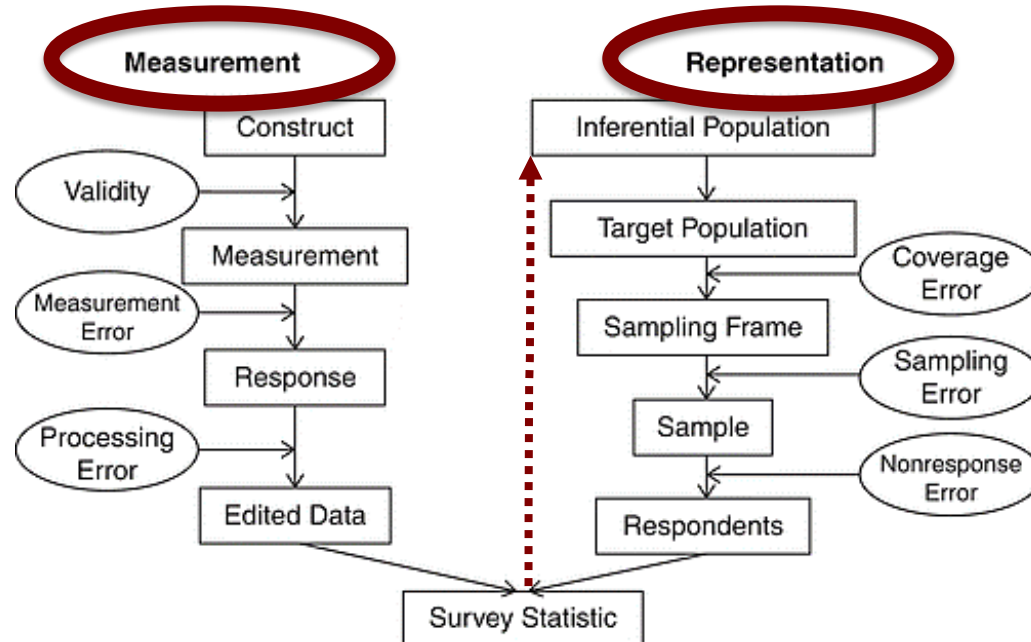
- Topic
- Language level, translation
- Wording
- Complexity
- Length
- Mode of data collection
- And more!



- Respondents:
 - Knowledge
 - Interest
 - Motivation
 - Cognitive “hardwiring”
 - Other attributes
- External influences, implicit norms, pragmatic constraints, and more!



The Total Survey Error Framework



SOURCE: Groves et al. (2009)

Spoiler Alert : There is no magic bullet.



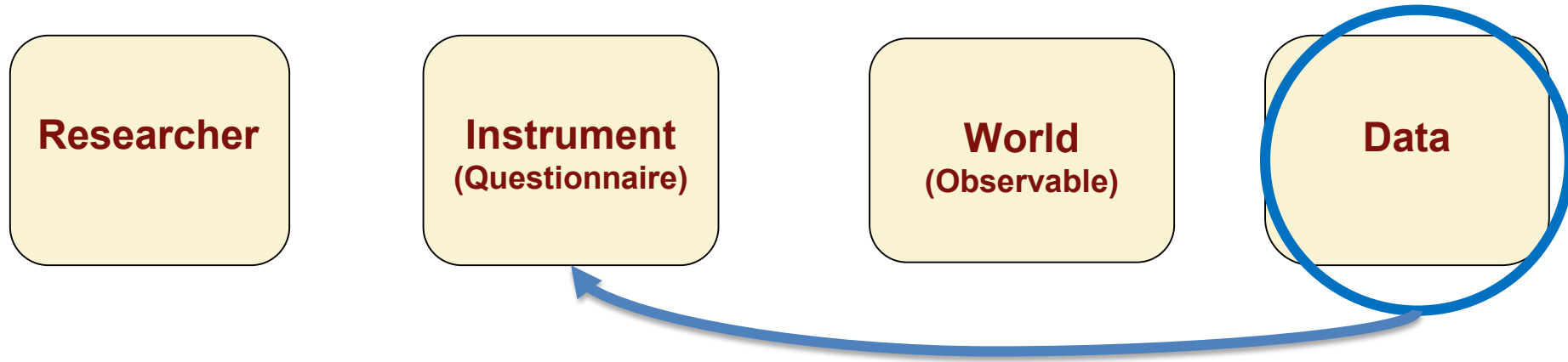
BEFORE YOU BEGIN TIP #1

Start at the end:

data analysis before data collection



For an analytically happy ever after...



Let data inform your instrument.



Develop an analysis plan first.

1. In very concrete, simple terms, what empirical question(s) are you seeking to answer?
2. What kinds of analyses will you need to perform?
3. Pragmatically, what will the data be used for?
4. What is the end product – manuscript, final report, presentation? Start thinking about a codebook now.
5. Communicate the above to your research team – including anyone who will help with assigning variables, values, cleaning, printing/assembly materials, training, other implementation tasks, reporting, etc.



Consult prior data and questionnaires.

1. Frequencies on relevant items, open-ended response entries, any subgroups, item nonresponse and missing.
2. Other meta-survey information (paradata), if available: survey duration, timers for specific sections/items, overall response rate.
3. Other statistical techniques: factor analysis, regression



Some data/questionnaire resources*

* Caveat: There may be important differences from your particular study!

1. Google, Google Scholar, academic journal databases
2. ICPSR: <http://www.icpsr.umich.edu/>
3. UNC Odum Institute: <http://arc.irss.unc.edu/dvn/>
4. Question Bank - UK: <https://discover.ukdataservice.ac.uk/variables>
5. Polling the Nations: <http://poll.orspub.com/>
6. Pew Center: <http://www.pewresearch.org/question-search/>
7. Gallup Polls: <https://analyticscampus.gallup.com/?ref=Auth>
8. Roper: <https://ropercenter.cornell.edu/CFIDE/cf/action/ipoll/index.cfm>
9. US Gov't Q Bank: <http://wwwn.cdc.gov/QBANK/Beta/Home.aspx>
10. World Values Survey: <http://www.worldvaluessurvey.org/WVSDocumentationWV6.jsp>
11. Academy of Management Measure Chest: http://rmdiv.org/?page_id=104



BEFORE YOU BEGIN TIP #2

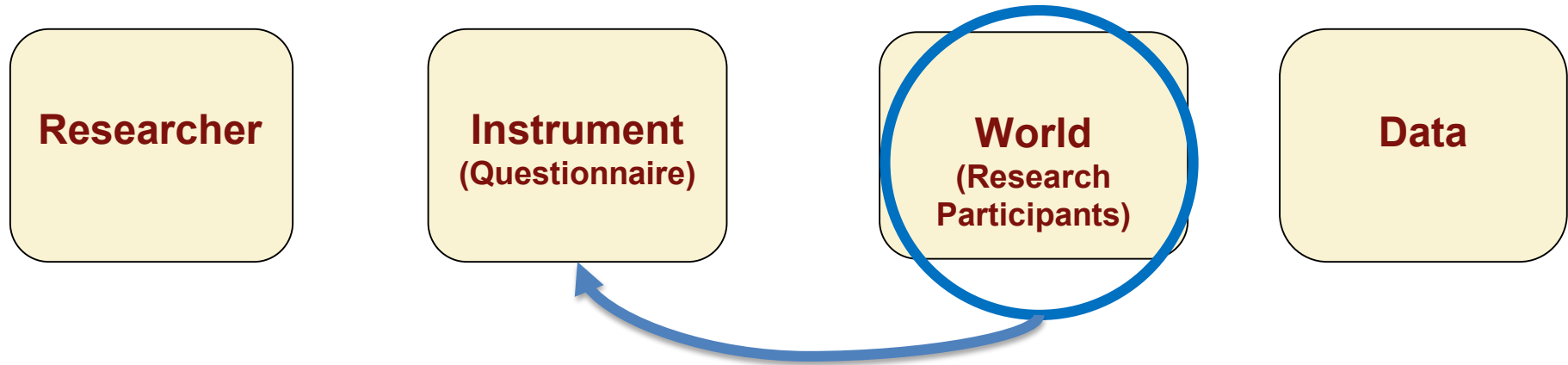
Respondents:
probably not that into you



Image credit: Pretzelpaws at English Wikipedia

NICE TRY SATAN

Nevertheless, tailored tools fit best.



Let knowledge about respondents and your population inform your instrument.



Cognitive misers and clever knaves.

“**Cognitive misers**” describes respondents who do not read, process, and respond to survey questions with consistent or maximized effort.

- Surveys can be burdensome – sometimes long, uninteresting, with difficult or embarrassing or intrusive questions. Cognitive misers conserve their mental effort! They might just coast along, answering without much reflection – just “satisficing.”

“**Clever knaves**” might describe respondents who actively thwart the implicit survey-taking “social contract” (to give honest responses) or respond with non-answers.

- Maybe there is a monetary incentive at the end?

Ultimately, this is about motivation, time, and interest: how can we encourage these respondents through questionnaire design decisions to turn into optimizers? (More on this later.)



The question-answering process.

A theoretical model from the Cognitive Aspects of Survey Methodology (CASM) approach in survey methods.

1. Comprehend individual words and put them together.
2. Retrieve relevant information and/or experiences.
3. Make a judgment based on the information.
4. Format the response into available response options.
5. Edit the response, potentially, depending on social desirability or other pressures.



BEFORE YOU BEGIN TIP #3

Mode matters:

Part I



What mode should your instrument be in?

A practical decision, often budget-driven, made early in the study design process for each study that nevertheless has **consequences for measurement**

- Respondents can answer questions and interact with the instrument in different ways depending on certain features of the mode
 - For example: open-text boxes on web surveys vs paper questionnaires, conveying skip logic on paper questionnaires vs web/phone
 - Also consider: differences between interviewer-administered vs self-administered modes
- What about multi-modal data collection or transitioning from one to another?
- For now, just let these ideas marinate. (There might be a discussion question later!)



Questions, an art and science

warning: this section has an activity



Jackson Pollock, *Free Form*

A few tips that may seem “obvious.”

1. Keep it short and simple. Start with the easy questions.
2. Keep the language level at about 6th grade.
3. Use full sentences. (In what year were you born? vs Birth year)
4. Avoid or define jargon and ambiguous or biasing/leading wording.
5. Avoid double-barreling. (Was your customer service representative today polite **and** competent?)
6. Negations are not easy to not interpret incorrectly.



More “obvious” tips.

1. Avoid hidden assumptions.
2. Avoid asking stuff respondents wouldn't likely know (unless measuring knowledge/awareness, etc.).
 - Hypotheticals and counterfactuals can be hard to imagine, let alone answer with confidence.
3. Avoid wording questions that trigger or exacerbate a “socially desirable” response or some motivated misreporting.



Question break! Any questions so far?



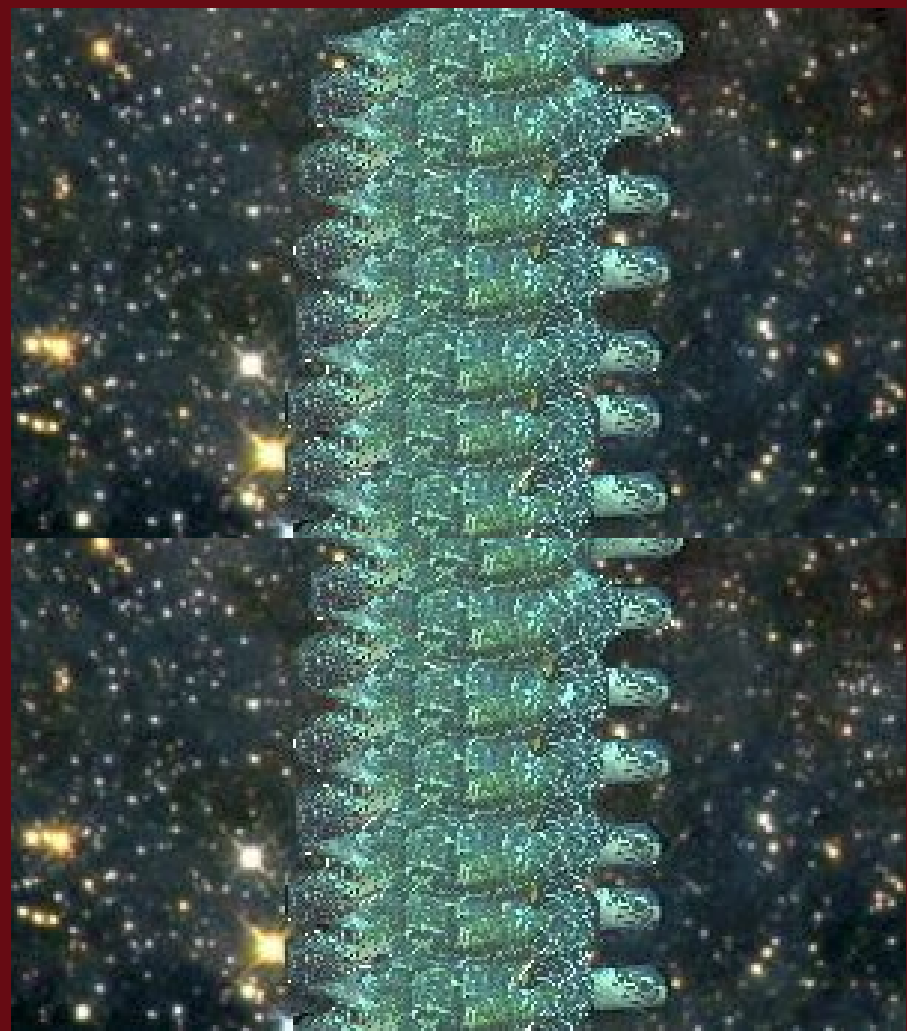
Let's practice! (10-15 minutes)

In groups or on your own, please try working through some potentially problematic questions considering the “obvious” tips just mentioned.

1. Identify problematic aspects, if any.
2. Try your hand at rewording the questions, if needed.
3. Don't worry if it doesn't seem so obvious after all. This is not a test. Just give it a shot!
4. Extra credit: can you think of any more implications?
5. Extra, extra credit: what about satisficers?



**More
methodological
considerations:
turtles all the way down**



Response categories.

1. **Response categories: make exhaustive and mutually exclusive; label all scale points**
2. Should the categories run unipolar or bipolar?
3. How many is optimal? 5-7? 3-4? Odd, even? Midpoint?
4. Which end should they start with?
5. Should there be a Don't Know category?
6. Should there be an Other category?
7. Should “vague quantifiers” (e.g., very often, somewhat often, not too often, never) be used?
8. Should there be forced response questions? Prompts?
9. Should there be range, consistency, or other content checks?



Open-ends and other question types.

1. When are open-ended questions appropriate?
2. What about multi-response items (select/check all)?
3. What about dropdowns, sliders, drag and drop, graphic representations?
4. What about “attention” questions?
5. What about preambles that introduce a new section?

Well, we asked a lot of questions... the answers?



Remember Tip #1?

(Data analysis before data collection.)

1. There are some general recommendations, but:
 - Available evidence may be thin or underdetermined on some and
 - Answers to these empirical questions may be specific to your particular study
2. Look at prior data, if available!
3. Pretesting/piloting could provide some clues – but must prioritize with other question testing needs



Mode matters: Part II.

Since mode considerations have been dutifully marinating in your mind since Slide 16, you might have already realized many of these questions could also have mode-related measurement issues.

- What are some that come to mind?



Effects within response categories.

1. Primacy effect
2. Recency effect
3. Range effect
4. Frequency effect

Why do these effects happen and what can be done to mitigate them?



Question order effects.

1. Asking about marital satisfaction prior to asking overall satisfaction with life can trigger respondents to exclude their marriage in their overall life satisfaction rating.
2. Asking a knowledge question about, e.g., performance record of a respondent's US representatives prior to asking a question about how frequently they follow the news can increase reports of "now and then" and "hardly ever."
3. Mentioning scandals a specific politician is involved in prior to asking a question about trustworthiness of politicians in general can lower the general rating but raise the rating for the scandal-ridden individual politician!

Why do these effects happen and what can be done to mitigate them?

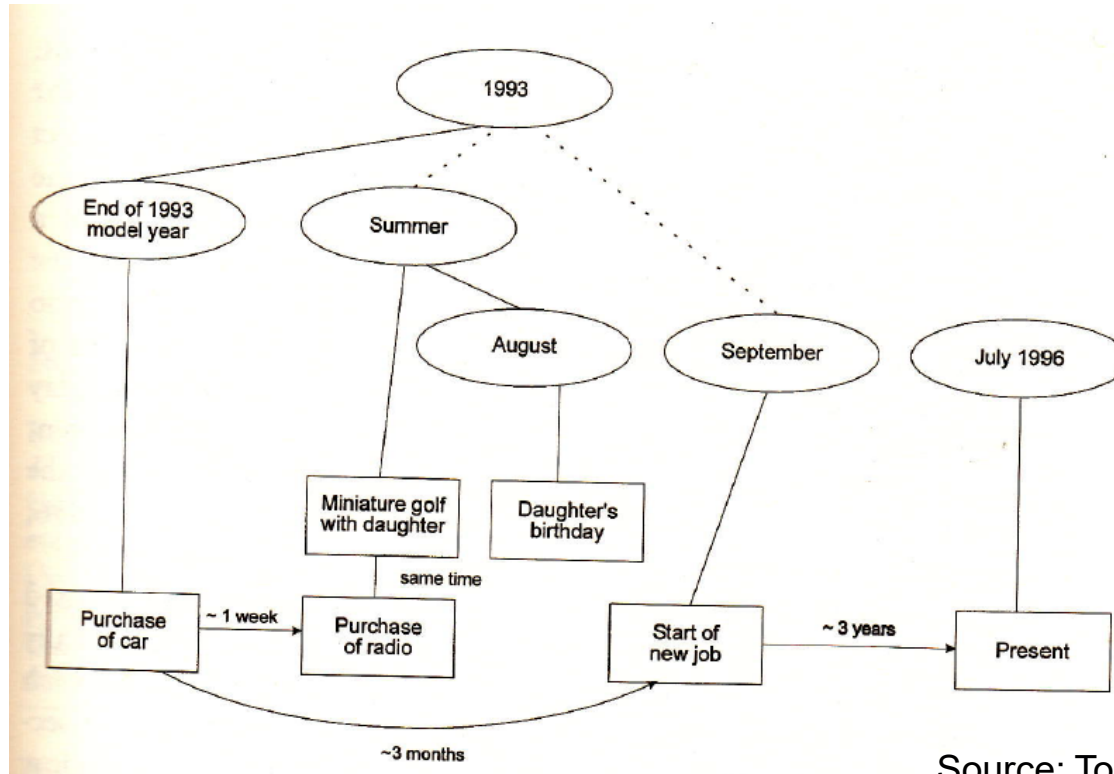


Difficult tasks: counting, estimating, recalling.

1. How many total times did you check your phone for texts, emails, or other messages yesterday?
2. How many hours of sleep do you get on a typical night?
3. What did you have for lunch two Tuesdays ago?
4. When did you buy your car radio?



When did you buy your car radio?



Source: Tourangeau et al. (2000)



Likert scales.

Commonly used rating scales in a large grid/matrix question format, typically to measure degree of agreement or disagreement (or frequency, importance, etc.) with a statement.

- Seem like an efficient use of space and they're very common. What could be wrong with them?
 - Consider the viewing space of your mobile phone
 - Acquiescence bias
 - Other satisficing behaviors



Remember Tip #2?

(Respondents: not that into you.)

What satisficing behaviors?

- “Straightlining” and zig-zag patterns on large grid questions.
- Survey fatigue, less careful reading and thinking/processing, speeding as satisficers traverse the grid.
- Randomization may help “even out” its effect overall.



Social desirability

Is it “real”? An anecdote from a study: “I can’t operate on my son.”

1. Potentially most pronounced differences between self-administered vs interviewer-administered survey modes
2. But some differences between interviewer-administered modes as well
 - An example from current research: In-person field interviews may be more successful in obtaining responses to certain sensitive questions, e.g., drug use, than interviews by telephone
 - Subsequent drug-denying in telephone follow-up to original face-to-face study where they had admitted drug use seems associated with time between interviews, older, higher income, married



Multicultural, multilingual instruments.

Rich, complex area of active methodological research. Two examples:

1. Self-rated health for Hispanic populations in the US:
 - Different interpretations of “health”: well-being (WHO definition) vs absence of disease (NIH definition)
 - Significant difference in estimates in this population depending on interpretation
 - Important public health implications since SRH can be good predictor of mortality
2. Extreme and midpoint reporting as a possible country/language-specific tendency
 - Meta-analysis study of several IUB student surveys: pattern observed largely independent of the questions themselves



More information on these topics.

- [University of Michigan Cross-Cultural Surveys Guidelines](#) – a very comprehensive overview of issues and recommendations
- Advances in Comparative Survey Methods: Multinational, Multiregional and Multicultural Contexts (3MC)
- Survey Methods in Multicultural, Multinational, and Multiregional Contexts



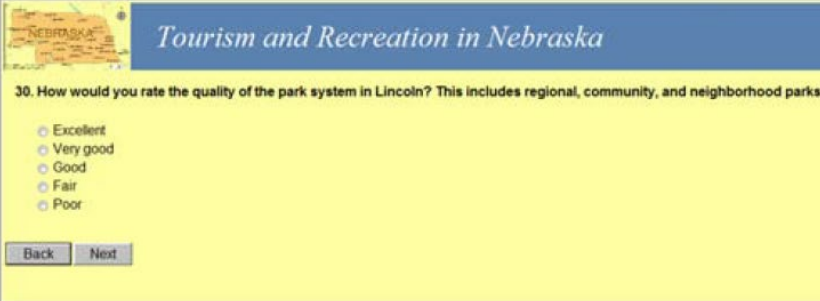
Format matters:

Visual design, mode, and measurement



Image source: usabilitygeek.com

Linear



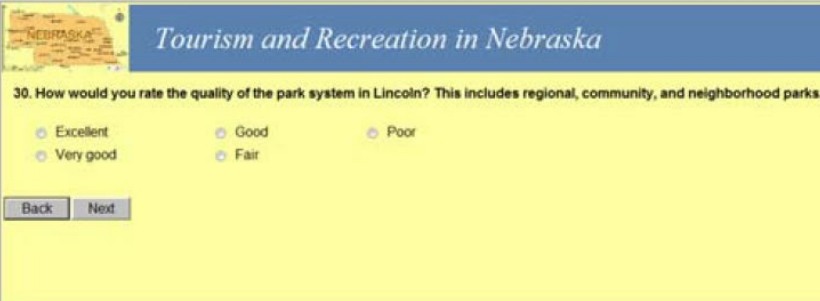
NEBRASKA

Tourism and Recreation in Nebraska

30. How would you rate the quality of the park system in Lincoln? This includes regional, community, and neighborhood parks.

- ☐ Excellent
- ☐ Very good
- ☐ Good
- ☐ Fair
- ☐ Poor

Triple
Banked



NEBRASKA

Tourism and Recreation in Nebraska

30. How would you rate the quality of the park system in Lincoln? This includes regional, community, and neighborhood parks.

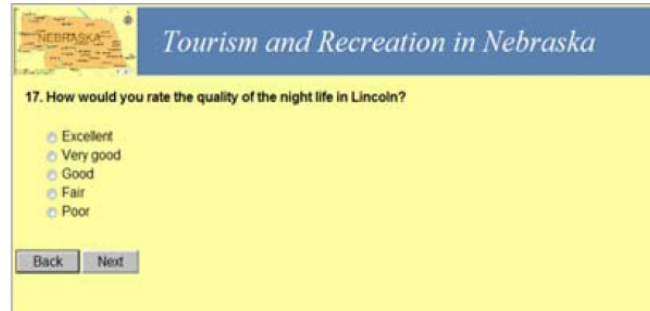
<input type="radio"/> Excellent	<input type="radio"/> Good	<input type="radio"/> Poor
<input type="radio"/> Very good	<input type="radio"/> Fair	



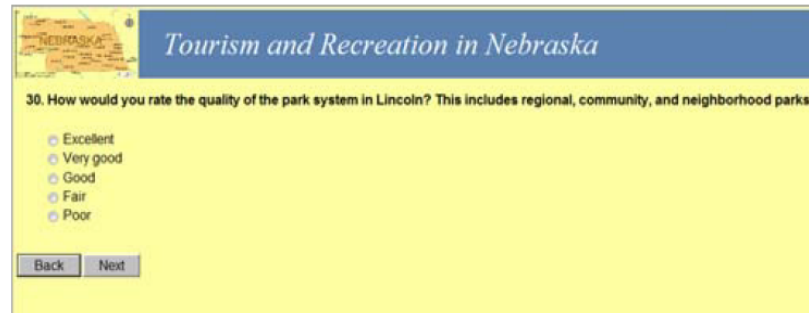
Source: Smyth, J. (2018). Visual Design in Surveys. [Webinar, sponsored by the Midwest Association for Public Opinion Research (MAPOR).]



All respondents to the linear version read the response options in order from top to bottom.



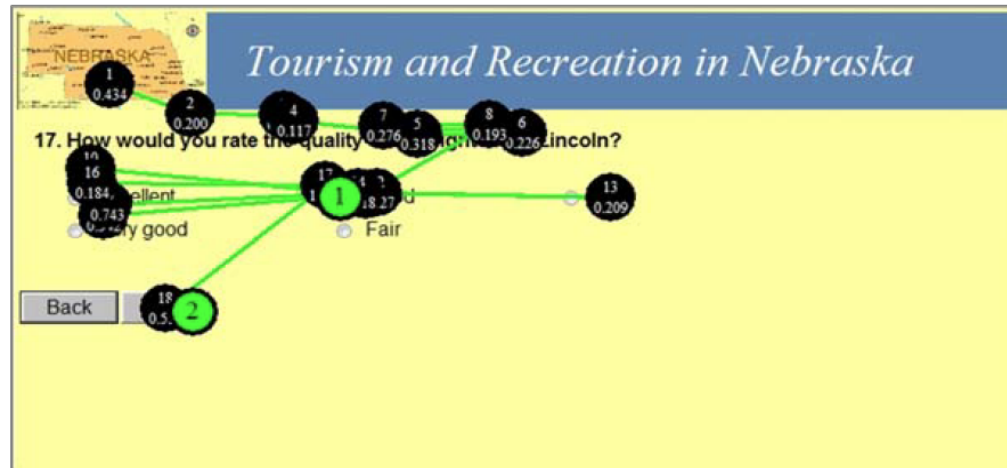
This screenshot shows a survey interface titled "Tourism and Recreation in Nebraska". It features a small map of Nebraska in the top left corner. The question is "17. How would you rate the quality of the night life in Lincoln?". Below the question are five radio button options: "Excellent", "Very good", "Good", "Fair", and "Poor". At the bottom of the form are two buttons: "Back" and "Next".



This screenshot shows a survey interface titled "Tourism and Recreation in Nebraska". It features a small map of Nebraska in the top left corner. The question is "30. How would you rate the quality of the park system in Lincoln? This includes regional, community, and neighborhood parks.". Below the question are five radio button options: "Excellent", "Very good", "Good", "Fair", and "Poor". At the bottom of the form are two buttons: "Back" and "Next".



But about 25% of those in the triple banked version read the response options out of order as illustrated here.



Source: Smyth, J. (2018). Visual Design in Surveys. [Webinar, sponsored by the Midwest Association for Public Opinion Research (MAPOR).]



Both cultural learning and cognitive processing influence how we make sense of visual information

What is your date of birth?

 ,

This format will make more sense to a respondent from the U.S.

What is your date of birth?

 ,

This format will make more sense to a respondent from Europe



© Jolene Smyth, 2014

9

Source: Smyth, J. (2018). Visual Design in Surveys. [Webinar, sponsored by the Midwest Association for Public Opinion Research (MAPOR).]



Which beverages offered in restaurants and other foodservice venues do you most closely associate with each of the statements listed below? **Please choose up to 3 beverages per statement.**

(Select upto three responses for each row.)

	Hot coffee	Hot specialty coffee	Cold or iced regular coffee	Cold or iced specialty coffee	Hot tea	Hot specialty tea	Cold or iced tea	Hot chocolate/cocoa	Carbonated regular soft drinks	Carbonated diet soft drinks	Fruit juice/ juice drink other than lemonade	Lemonade	Vegetable juice	White milk	Flavored milk	Soy/ rice milk	Smoothie	Milkshake	Ice based drinks (Icées, Slurpees)	Bottled water	"Free" tap water	Sports drinks (Gatorade, PowerAde)	Energy Drinks (Red Bull, Monster)	None of these
Healthy or good for you	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Packed with vitamins and nutrients	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Most thirst quenching/refreshing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Can drink any time during the day	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Most appropriate with breakfast	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Most appropriate with lunch	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Most appropriate with dinner	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Best for drive-thru	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Best for a sit-down meal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Most appropriate to consume in a company/school cafeteria	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
I should be drinking more of this beverage when I go out to eat.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
I should be drinking less of this beverage when I go out to eat.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Goes well with food	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is fun to drink	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is a special treat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
A good "snack"	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
A good drink to relax with	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Most appropriate for kids	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Can't get it at home	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

>>



**These are issues of measurement –
not simply “is it pretty” or
“is it web-optimized”**



Instrument draft is developed: now what?

WHO SHOULD FILL OUT THIS SURVEY?

Please have the adult (age 18 and over) in your household who has had the most recent birthday complete the survey.

SECTION A: WHERE YOU LIVE

We'll start by asking you a few questions about your community and how it's changed.

A1. Which of the following best describes the community where you live?

- ☐ Rural
- ☐ Suburban
- ☐ Small Town
- ☐ Urban

A2. For how many years have you lived in the community where you now live?

- ☐ 0-1
- ☐ 11-20
- ☐ 2-5
- ☐ 21 years or more
- ☐ 6-10

A3. For how many years have you lived in the home (including apartments) where you now live?

- ☐ 0-1
- ☐ 11-20
- ☐ 2-5
- ☐ 21 years or more
- ☐ 6-10

A4. Do you own or rent your current residence? For the purpose of the survey, you own your home even if you have a mortgage.

- ☐ Own
- ☐ Rent
- ☐ Living rent-free with others (including family)
- ☐ Other (please describe) _____

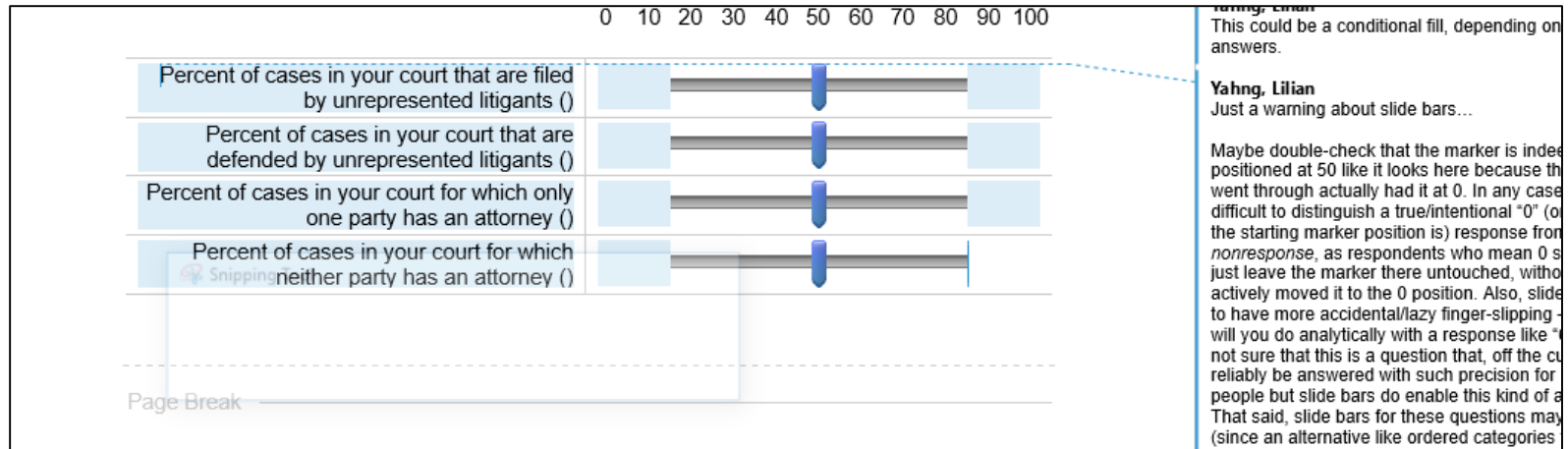
A6. Which of the following best describes your need for a motorcycle, car or truck?

- ☐ I couldn't live here without a motorcycle, car or truck
- ☐ I use a motorcycle, car or truck frequently, but could walk or ride a bike more, if I chose
- ☐ I rarely or never use a motorcycle, car or truck

Expert reviews

Consider obtaining expert reviews of your questionnaire by

- Survey methodologist
- Substantive area expert



Cognitive interviewing

A method to help
semi-structured
to the target population

- It is “cognitive”
psychological
respondents
- Two basic types
- An iterative process
and then
- An important part
the US Census

res through
o are similar
stions.

processes and
ected are
they take it.

iewing again,

ncies including

COGNITIVE INTERVIEW GUIDE

DATE: ____/____/20____

RESPONDENT CASE ID: _____

INTERVIEWER INITIALS: _____

FRONT END (5 minutes)

- Review SIS/consent form
- Ask if R has any questions
- Turn on audio recorder before providing questionnaire or materials

INTERVIEW STARTED ____:____ AM/PM

QUESTIONNAIRE MEASUREMENT

- ☐ **Ask R to take either the PAPER or WEB survey** (circle one). Please take the survey on your own as best as you can. If you have questions about anything, just make a quick note and we can address them after you finish.

START TIME: _____



Field pretesting/piloting

1. Cognitive interviews are strongly recommended.

- Time-intensive but many benefits.
- Findings can be publishable as well!

2. However if resources do not allow for cognitive interviews, do try to conduct at least a field pretest/pilot of the questionnaire.

- Attempt to mirror procedures and details of the actual study as closely as possible, only on a smaller scale.
- Test versions of questions experimentally, if unsure of them.
- Possibly ask a few post-survey questions to get feedback.



The End.
(But this is just the tip of the iceberg.)

Questions?

Please also visit our **FREE** consulting hours

Social Science Research Commons

Woodburn Hall 200
Tuesdays, 10am - noon



Scholars' Commons

Herman B. Wells Library, 1st Floor of East Tower
Wednesdays, Noon - 2pm



Resources

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Thank You

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